

REMARKS

This is in response to the Office Action mailed on July 27, 2004. Claims 1 - 4, 6 - 10, 12 - 19, and 36 are amended, no claims are canceled, and no claims are added; as a result, claims 1-25 and 36-41 are now pending in this application.

Information Disclosure Statement

A Supplemental Information Disclosure Statement and 1449 Form are submitted together with this response. Applicant respectfully requests that a copy of the 1449 Form, with the cited references initialed as having been considered by the Examiner, be returned to Applicant's representatives with the next official communication.

Amendments to the Specification

The specification has been amended to recite the serial number and filing date of the patent applications that were previously identified by attorney docket number, and to bring the specification and FIGS. 3A-3B into agreement. Applicant respectfully requests consideration of this amendment by the Examiner, and further requests the Examiner to either provide objections to the amendment or expressly approve of the amendment in the next action.

§102 Rejection of the Claims

Claims 1-5 and 11-14 were rejected under 35 USC § 102(e) as being anticipated by Hammond et al.(U.S. 2003/0013323 A1). Applicant respectfully traverses this rejection.

Applicant does not admit that the cited Hammond reference is prior art and reserves the right to swear behind any cited reference at a latter date. The cited reference of Hammond is seen as teaching a method of forming both buried channel devices and surface channel devices on a hetero-structure substrate by selectively removing silicon germanium alloys. The method includes using a steam oxidation process to rapidly oxidize the remaining vertical thickness of the SiGe layer, since the oxidation rate decreases by about a factor of four times when the strained silicon layer is reached. Applicant respectfully submits that the Office Action is incorrect in stating on page 2, second from last line, that the arrangement of Hammond is "vertically isolating the strained silicon layer from the substrate by undercutting (Figure 5, and

Paragraph 0024)”, and submits that there is nothing in the cited portion of the reference that discusses vertical isolation. The isolation in the cited reference is strictly horizontal isolation as noted in paragraph 0024 where it states that “Isolation trenches 34, 36 and 38 may then be formed to isolate the various regions from one another”. Applicant submits that there is no vertical isolation taught in the cited reference, and that if a junction, such as 40 or 42 in figure 10, were to be forward biased, then it would communicate with the substrate 12.

Therefore Applicant respectfully submits that the cited reference of Hammond does not contain all of the features of the claimed invention, specifically “*vertically isolating the strained silicon layer from the substrate by undercutting*”, since there is no undercutting resulting in vertical isolation in the cited reference. In view of the above noted failure of the cited reference to teach each and every feature of the claims, Applicant requests that this rejection be reconsidered and withdrawn.

Allowable Subject Matter

Claims 6-10, 15-18, 20-21, and 37-41 were indicated to be allowable if rewritten to overcome the objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The present response has amended dependent claims 6 and 15 to be in independent form to include language found in the base claims 1 and 11 respectively and any intervening claims. Newly independent claim 6 has also been amended to add the term “layer” after the terms “strained silicon”. Claims 7-10 have been amended to depend from allowable newly independent claim 6, and claims 16-18 have been amended to depend from allowable newly independent claim 15. Dependent claims 37-41 depend from now allowable independent claim 36, and thus are already in patentable condition with the present amendment to claim 36. Applicant therefore requests that this objection be withdrawn and claims 6-10, 15-18, 20-21, and 37-41 be passed to allowance.

Claims 19 and 36 were indicated to be allowable if rewritten or amended to overcome the objections set forth in this Office action. The present response has amended independent claims 1, 19 and 36 to change the “strained silicon” to “strained silicon layer”. Applicant therefore requests that this objection be withdrawn and claims 19 and 36 passed to allowance.

Claims 22-25 were allowed. Applicant thanks the Examiner for the indication of allowable subject matter.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney David Suhl at (508) 865-8211 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.


Respectfully submitted,

LEONARD FORBES

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6960

Date 10-19-04

By 
Marvin L. Beekman
Reg. No. 38,377

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 20 day of October, 2004.

KACIA LEE
Name

Kacia Lee
Signature